

MILITARY ORDERS FROM THE GENERAL SURGEON AT SHAFTER MEDICAL IN HAWAII

Subject: P 180041Z MAR 03 DMS IIIMEF MED FORCE HEALTH PROTECTION PLAN FOR III MEF OPERATIONS AND EXERCISES IN THE KINGDOM UNCLAS DMS IIIMEF 7COMMBN

TO CG 3RD MARDIV(n)  
CG 1ST MAW(n)  
CG 3RD FSSG(n)  
III MHG(n)  
7TH COMM BN(n)  
CC COMMARFORPAC G4(n)  
CDRICORPS FT LEWIS WA  
ICORPS G4(n)  
ICORPS G3(n)  
USARPAC SURGEON FT SHAFTER HI  
UNCLAS

MSGID/GENADMIN/CG III MEF G4 HSS/00208//  
SUBJ/FORCE HEALTH PROTECTION PLAN FOR III MEF OPERATIONS AND EXERCISE /IN THE KINGDOM OF THAILAND (KT) 2003 PART II//  
REF/A/WEB/MIC.AFMIC.DETRICK.ARMY.MIL/-//  
REF/B/WEB/WWW.TRAVEX.COM/-//  
REF/C/DOC/CDC HEALTH INFO FOR TRAVEL/-//  
REF/D/DOC/NEHC TN-PM 6250.98.2/-//  
REF/E/DOC/USCINCINCPACINST 6200.2/-//  
REF/F/DOC/BUMEDINST 6220.12A/-//  
REF/G/DOC/DOD DIRECTIVE 6490.5/-//  
REF/H/DOC/BUMEDINST 6230.15/-//  
REF/I/DOC/BUMEDNOTE 6230/-//  
REF/J/MSG/CMC WASHINGTON DC/201615ZSEP2002//  
REF/K/MSG/CMC WASHINGTON DC PPO/081821ZJAN2003//  
REF/L/DOC/III MEF FORCE ORDER 6700.1/YMD:20010620//  
REF/M/DOC/NAVMED P-5010/-//  
REF/N/WEB/WWW.NEHC.MED.NAVY.MIL/-//  
NARR/REF A AND B ARE UNCLASSIFIED WEBSITES WITH UP TO DATE  
HEALTH/ENVIRONMENTAL ADVISORIES AND COUNTERMEASURES INFORMATION FOR  
THE KT. REF C IS THE CDC GUIDE HEALTH INFORMATION FOR INTERNATIONAL  
TRAVEL, 2001-2002. REF D IS THE NAVY MEDICAL DEPARTMENT POCKET  
GUIDE TO MALARIA PREVENTION AND CONTROL. REF E IS USCINCPAC FORCE  
HEALTH PROTECTION (FHP) PROGRAM FOR DEPLOYMENTS. REF F IS MEDICAL  
EVENT REPORTS. REF G IS DOD COMBAT STRESS CONTROL (CSC) PROGRAMS.  
REF H THROUGH K PROVIDE IMMUNIZATION GUIDANCE. REF L PROVIDES III  
MEF GUIDANCE ON PERSONAL PROTECTIVE MEASURES AGAINST VECTOR-BORN  
DISEASES. REF M PROVIDES DETAILED GUIDANCE ON NAVAL PREVENTIVE  
MEDICINE SERVICES. BELOW, PARAGRAPH 1 PROVIDES GENERAL FHP  
GUIDANCE. PARAGRAPH 2 PROVIDES ENVIRONMENTAL HEALTH RISKS.  
PARAGRAPH 3 PROVIDES INFECTIOUS DISEASE RISK ASSESSMENTS. PARAGRAPH  
4 PROVIDES BRIEF MEDICAL CAPABILITIES. PARAGRAPH 5 PROVIDES CONTACT  
INFORMATION//  
POC/LCDR HANLEY, K. A./PREVMEDOFF/CG III MEF G4 HSS/LOC:OKINAWA, JAP  
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GENTEXT/REMARKS/1. GENERAL FORCE HEALTH PROTECTION GUIDANCE.

A. THIS MSG PROVIDES GENERAL GUIDANCE TO ALL III MEF PERSONNEL DEPLOYING TO THE KT IN 2003 BUT ESPECIALLY THOSE DEPLOYING IN SUPPORT OF COBRA GOLD 2003. OTHERS PARTICIPATING IN COBRA GOLD UNDER III MEF JTF SHALL FOLLOW THESE GUIDELINES UNLESS (1) CLEARLY OVER-RIDDEN BY SERVICE SPECIFIC GUIDANCE OR SENIOR SERVICE SPECIFIC PREVENTIVE MEDICINE GUIDANCE AND (2) DISCUSSED WITH III MEF SURGEON OR III MEF PREVENTIVE MEDICINE OFFICER. MEDICAL PERSONNEL SHALL OBTAIN OR DOWNLOAD REFERENCES A THROUGH N PRIOR TO DEPLOYMENT. PERSONNEL DEPARTING FROM THE KT TO OTHER EXERCISES OR OPERATIONS MUST COMPLY WITH THE FHP GUIDANCE FOR THAT EXERCISE OR OPERATION AS WELL AS THE GUIDANCE FOR KT.

B. FORCE HEALTH PROTECTION (FHP) RECOMMENDATIONS. THESE GUIDELINES ARE PRIMARILY EXCERPTS AND CLARIFICATIONS FROM THOSE DEVELOPED BY THE JOINT PREVENTIVE MEDICINE POLICY GROUP AS NOTED IN REF A. THEY ARE DESIGNED TO PROTECT UNITS AND PERSONNEL FROM DISEASE AND NON-BATTLE INJURY. LINE COMMANDERS ARE RESPONSIBLE FOR IMPLEMENTING AN EFFECTIVE FHP PROGRAM. MEDICAL COMMANDERS ARE RESPONSIBLE FOR IDENTIFYING HEALTH THREATS AND APPROPRIATE COUNTERMEASURES. FOR OPERATION OR EXERCISE SPECIFIC FHP GUIDANCE, REFER TO COBRA GOLD 2003 ANNEX Q GUIDANCE AND DIRECTIVES ISSUED BY THE COMBATANT/JOINT STAFF COMMANDER.

C. MAJOR INFECTIOUS DISEASE COUNTERMEASURES FOCUS

(1) AFMIC ASSESSMENT: THE KT IS A HIGH-RISK COUNTRY FOR INFECTIOUS DISEASES. WITHOUT FHP MEASURES, MISSION EFFECTIVENESS WILL BE JEOPARDIZED. THE MAJOR TRANSMISSION CATEGORIES FOR WHICH COUNTERMEASURES ARE INDICATED INCLUDE:

(A) FOOD/WATERBORNE DISEASES: DIARRHEA, HEPATITIS, TYPHOID FEVER AND OTHERS.

(B) VECTOR-BORNE DISEASES: MALARIA (INCLUDING RELAPSING FORMS), DENGUE FEVER, JAPANESE ENCEPHALITIS, CHIKUNGUNYA FEVER AND MITE BORNE TYPHUS.

(C) SEXUALLY TRANSMITTED DISEASES: HIV, HEPATITIS B, CHLAMYDIA, GONORRHEA, AND MANY OTHERS.

(D) ANIMAL-CONTACT DISEASES: RABIES.

(E) WATER-CONTACT DISEASES: LEPTOSPIROSIS.

D. FHP PRIORITIES BEFORE DEPLOYMENT. INVOLVE PREVENTIVE MEDICINE (PM) PERSONNEL IN PRE-DEPLOYMENT PLANNING. IAW REFS A AND E, CONDUCT PRE-DEPLOYMENT HEALTH SCREENING USING FORM DD-2795 AND ADULT PREVENTATIVE AND CHRONIC CARE FLOWSHEET FORM DD-2766 FOUND RESPECTIVELY AT

AMSA.ARMY.MIL/DEPLOY\_SURV/DD2795\_PRE\_DEPLOY.PDF AND  
WWW-NEHC.MED.NAVY.MIL/DOWNLOADS/HP/2766FRM.PDF.

(1) PERFORM SCREENING/TESTING. ENSURE DNA AND G-6-PD SCREENS ARE DOCUMENTED IN PATIENT OUTPATIENT RECORD. ENSURE NEGATIVE HIV AND APPROPRIATELY MANAGED PPD HAVE BEEN OBTAINED IN THE YEAR PRIOR TO DEPLOYMENT. ENSURE PHYSICAL EXAM IS CURRENT AND MEMBER IS DENTAL CLASS I OR II. ENSURE MEMBERS HAVE NO KNOWN MEDICAL CONDITIONS FOR WHICH CARE IS UNAVAILABLE DURING EXERCISE OR FOR WHICH MEDEVAC IS LIKELY IN THE EVENT OF CONDITION EXACERBATION. EXAMPLES INCLUDE P-4 PROFILE, LIMITED DUTY, PREGNANCY, AND ALTERED MENTAL HEALTH.

(2) ENSURE IMMUNIZATIONS. THE FOLLOWING IMMUNIZATIONS ARE REQUIRED FOR III MEF FORCES IN THE KT. NON-III MEF FORCES SHOULD REFER TO PARENT SERVICE GUIDANCE FOR DEFINITIVE IMMUNIZATION GUIDANCE.

(A) HEPATITIS A VACCINE. A TWO-SHOT SERIES, THE FIRST GIVEN AT LEAST 14 DAYS BEFORE DEPLOYMENT, THE SECOND DOSE IN 6-12 MONTHS. AT LEAST PRIMARY SHOT IS REQUIRED TO DEPLOY.

(B) HEPATITIS B VACCINE. A THREE-SHOT SERIES FOR MEDICAL PERSONNEL AND THOSE AT RISK OF BLOOD/BODILY FLUID EXPOSURE. HEPATITIS B VACCINATION IS A REQUIRED TREATMENT FOR THOSE WITH A STD DIAGNOSIS. OFFER VACCINE FOR ALL EVALUATIONS AND THOSE WHO'S LIFESTYLES PRESENT INCREASED RISK. IN ADDITION, CONSIDER FOR PROVOST MARSHAL AND FIRE/EMERGENCY RESPONSE PERSONNEL.

(C) INFLUENZA VACCINE. CURRENT VACCINE ADMINISTERED.

(D) JAPANESE ENCEPHALITIS VACCINE. THREE-SHOT SERIES COMPLETE. BOOSTER EVERY THREE YEARS IF REQUIRED TO RETURN TO RISK AREAS.

(E) MEASLES VACCINE. A SINGLE DOSE OF MEASLES VACCINE AS AN ADULT (MMR, MR, OR MEASLES ONLY).

(F) POLIO (ORAL OR INJECTABLE) VACCINE. THREE DOSE PRIMARY SERIES PLUS ONE ADDITIONAL DOSE AS AN ADULT.

(G) TETANUS/DIPHTHERIA TOXOID. THREE DOSE PRIMARY SERIES. BOOSTER DOSES REQUIRED EVERY 10 YEARS.

(H) TYPHOID VACCINE. MODIFIED ACCELLULAR, PARENTERAL, TYPHOID VACCINE (VICPS) PROVIDES IMMUNITY FOR 2 YEARS.

(I) ANTHRAX VACCINATION. LIKELY NOT REQUIRED. REVIEW REF J MARADMIN 502/02 OR MORE RECENT GUIDANCE TO DETERMINE NEED.

(J) SMALLPOX VACCINATION. LIKELY NOT REQUIRED. REVIEW REF K MARADMIN 008/03 OR MORE RECENT GUIDANCE TO DETERMINE NEED.

(3) ENSURE DOCUMENTATION OF ALL PRE-DEPLOYMENT MEDICAL PREPARATIONS ON DD FORM 2766 (ADULT PREVENTIVE AND CHRONIC CARE FLOWSHEET) AND DD FORM 2795 (PRE-DEPLOYMENT HEALTH ASSESSMENT).

(4) DETERMINE IF MALARIA CHEMOPROPHYLAXIS IS REQUIRED. THE DECISION TO PRESCRIBE MALARIA CHEMOPROPHYLAXIS SHOULD BE MADE BASED ON DIRECTIVES FROM THE COMBATANT COMMAND OR OTHER COMMAND AUTHORITY, AS WELL AS THE SPECIFIC CHARACTERISTICS OF THE DEPLOYMENT, INCLUDING THE DURATION OF EXPOSURE, ANTICIPATED EXPOSURE TO MOSQUITOES, TYPE OF ACTIVITIES, AND OTHER FACTORS. THE CHOICE OF CHEMOPROPHYLACTIC MEDICATION SHOULD BE BASED ON CLINICAL JUDGMENT AND RELEVANT OFFICIAL GUIDANCE. AT RISK INDIVIDUALS IN NEED OF CHEMOPROPHYLAXIS FOR THIS MESSAGE ARE THOSE PERSONNEL IN RURAL FIELD SETTINGS NEAR BORDER REGIONS OF THE KT (BURMA, LAOS, CHANTHABURI REGION NEAR CAMBODIA, AND PENINSULAR THAILAND). THESE REGIONS ARE REPORTED BY THE WORLD HEALTH ORGANIZATION (WHO) TO HAVE ANNUAL MALARIA INCIDENCE OF AT LEAST 5-20 PER THOUSAND. A LARGE PORTION OF THE KT MALARIA BURDEN IS RELATED TO FORESTED BORDER REGIONS OF BURMA AND CAMBODIA. MULTI-DRUG RESISTANCE IS FOCUSED IN THESE REGIONS AS WELL. PERSONNEL BILLED IN SCREENED FIXED URBAN SETTINGS OR IN AREAS NOT KNOWN TO HAVE MALARIA OR, IF PRESENT, REPORTED BY THE WHO AT LESS THAN 2 PER THOUSAND ANNUAL INCIDENCE (E.G., BANGKOK, SATTAHIP, SAMAE SAN, RAYONG), AND UNLIKELY TO TRAVEL TO RISK REGIONS MAY, IN CONSULTATION WITH THEIR ASSIGNED MEDICAL SUPPORT UTILIZE DEET/PERMETHRIN AND OTHER PPM AS THEIR PRIMARY MALARIA PREVENTION MEASURE. ALL PERSONNEL, AND ESPECIALLY THOSE NOT UTILIZING MALARIA CHEMOPROPHYLAXIS, SHALL BE ADVISED OF THE SYMPTOMS OF MALARIA INFECTION AND THE NEED TO REPORT SUCH SYMPTOMS UP TO SEVERAL YEARS AFTER LEAVING DEPLOYMENT SITE. SOME AREAS WITH LOW REPORTED INCIDENCE BUT IN REMOTE REGIONS/FIELD CONDITIONS MAY HAVE POORLY CHARACTERIZED MALARIA RISK (I.E., ADJACENT TO BORDER PROVINCES OR UNCLEAR PRESENT MALARIA PREVALENCE). PERSONNEL IN FIELD CONDITIONS IN THESE MEDIUM RISK AREAS (KORAT A.K.A. NAKHON RATCHISIMA, LOP BURI, PHITSANULOK, UDON THANI) SHOULD CONSIDER MALARIA CHEMOPROPHYLAXIS AFTER CONSULTATION WITH COBRA GOLD ANNEX Q GUIDANCE AND LOCAL MEDICAL EXPERTS. THE WHO'S MALARIA DISTRIBUTION IN THE KT FOR

CY1997-1999 CAN BE FOUND AT W3.WHOSEA.ORG/MALARIA/MALINCITHAI.HTM  
(A) MALARIA CHEMOPROPHYLAXIS. SEVERAL OPTIONS FOR MALARIA CHEMOPROPHYLAXIS EXIST IN THE KT. BECAUSE OF ITS ABILITY TO PROVIDE SOME PROTECTION AGAINST OTHER INFECTIONS SUCH AS LEPTOSPIROSIS AND ITS ACCEPTABILITY IN FLIGHT SURGEON SUPERVISED AVIATORS, DOXYCYCLINE IS THE PREFERRED MALARIA CHEMOPROPHYLAXIS IN THE KT. START DOXY 2 DAYS BEFORE ARRIVAL INTO THE THREAT REGION AND CONTINUE UNTIL 28 DAYS AFTER DEPARTURE. BECAUSE OF OCCASIONAL GASTRIC AND ESOPHAGEAL SIDE EFFECTS, IT SHOULD BE TAKEN WITH FOOD AND SEVERAL HOURS BEFORE RECLINING. SUNSCREEN USE CAN REDUCE THE RISK OF SEVERE SUNBURNS FROM THE DOXY ASSOCIATED INCREASED PHOTOSensitivity. ADDITIONAL CHEMOPROPHYLAXIS OPTIONS INCLUDE MALARONE. FLIGHT SURGEONS CONSIDERING MALARONE ARE REQUIRED TO CONSULT WITH THE 1MAW SURGEON OR NAMI DIRECTLY. PREGNANT WOMAN SHOULD AVOID MALARIA RISK REGIONS DUE TO THREAT TO THE FETUS FROM MALARIA INFECTION.

(B) ADDITIONAL POST-EXPOSURE PROPHYLAXIS. SOME STRAINS OF MALARIA (P. VIVAX) CAN RESIST MALARIA CHEMOPROPHYLAXIS DURING THE HEPATIC PHASE OF THE INFECTION. TO PREVENT POST-PROPHYLACTIC TREATMENT RESURGENCE OF MALARIA, UNLESS G6PD DEFICIENT, THOSE RECEIVING MALARIA CHEMOPROPHYLAXIS WILL ALSO TAKE PRIMAQUINE 26.3MG(15MG BASE) DAILY WITH FOOD FOR 14 DAYS STARTING ON THE DAY OF DEPARTURE FROM THE KT. THOSE DEFICIENT IN G6PD CAN DEVELOP HEMOLYTIC ANEMIA WHEN USING PRIMAQUINE. THE G6PD STATUS OF PERSONNEL MUST BE KNOWN PRIOR TO PRIMAQUINE ADMINISTRATION. PERSONNEL WHO ARE G6PD DEFICIENT WILL NOT RECEIVE PRIMAQUINE, BUT WILL BE COUNSELED AND MONITORED FOR DISEASE. THOSE ON MALARIA PROPHYLAXIS WILL BE DEFERRED AS BLOOD DONORS FOR ONE YEAR AFTER RETURN, IF THEY DID NOT STAY IN THE MALARIA ENDemic AREA FOR LONGER THAN 6 MONTHS. THOSE STAYING IN A MALARIOUS AREA FOR LONGER THAN 6 MONTHS CANNOT DONATE BLOOD FOR 3 YEARS AFTER DEPARTING THE MALARIOUS AREA.

(5) PROCURE PERSONAL PROTECTIVE SUPPLIES (PPS). PPS WILL MINIMIZE ILLNESSES TRANSMITTED BY MOSQUITOES, TICKS, MITES, AND OTHER ARTHROPODS (MALARIA, DENGUE FEVER, AND JAPANESE ENCEPHALITIS). THE COMBINATION OF CLOTHING TREATMENT AND SKIN REPELLENT IS VERY PROTECTIVE. OPERATIONS IN THE KT REQUIRE A COMPLETE COMMAND PREVENTION PROGRAM INVOLVING PROCUREMENT OF SUPPLIES, TRAINING, SUPERVISION, AND COMMAND ENFORCEMENT. PER REFERENCE (L), COMMANDING OFFICERS WILL APPOINT A FORCE HEALTH PROTECTION OFFICER TO ENSURE ALL PERSONNEL HAVE UNIFORMS TREATED WITH PERMETHRIN AND ARE ISSUED 2 TUBES/BOTTLES OF DEET INSECT REPELLENT. PURCHASE OF INSECT REPELLENTS IS A UNIT RESPONSIBILITY. THE FOLLOWING PPS GUIDELINES APPLY:

(A) PROCURE DEET INSECT REPELLENT (NSN 6840-01-284-3982) FOR USE ON EXPOSED SKIN. IT PROTECTS FROM BITING INSECTS FOR UP TO 12 HOURS. MORE FREQUENT APPLICATION IS REQUIRED IN HOT CLIMATES, WITH PROFUSE PERSPIRATION, OR HEAVY RAINS. EMPHASIS ON DAY USE IS IMPORTANT FOR DENGUE MOSQUITOES AND EVENINGS/NIGHT FOR MALARIA.

(B) TREAT FIELD UNIFORMS WITH PERMETHRIN. PREFERRED TREATMENT IS 40% LIQUID PERMETHRIN (NSN 6840-01-334-2666) APPLIED WITH A 2-GALLON SPRAYER. THIS PROVIDES INSECT REPELLENT PROPERTIES THAT LASTS THE LIFE OF THE UNIFORM (UNLESS DRY CLEANED) AND IS LESS EXPENSIVE THAN THE AEROSOL FORMULATION. ASSISTANCE FOR PERMETHRIN APPLICATION IS AVAILABLE FROM PREVENTIVE MEDICINE (PM) SUPPORT, 3D MEDICAL BATTALION, DSN 623-7202/4962. AS A LESS DESIRABLE ALTERNATE, PERSONNEL CAN TREAT UNIFORMS WITH PERMETHRIN AEROSOL IN SIX-OUNCE CANS (NSN 6840-01-278-1336). APPLY 2/3 OF THE CAN TO UNIFORM, 1/3

TO BEDNET. BECAUSE OF POORER PENETRATION, IT MAY ONLY LAST 5 WEEKS OR 5 WASHINGS.

(C) PROCURE PERMETHRIN TREATED BED NETS FOR ALL PERSONNEL IN FIELD CONDITIONS. ENSURE POLES ARE AVAILABLE AND PERSONNEL UNDERSTAND PROPER USE OF BEDNET (AVOIDING CONTACT WITH SKIN WHILE ASLEEP, TUCKED BENEATH MATTRESS OR SLEEPING BAG, ETC.).

(D) ADDITIONAL PPS. ENSURE PERSONNEL BRING SUNSCREEN, LIP BALM, HEARING PROTECTION, 1-2 MONTHS OF AUTHORIZED PRESCRIPTIONS (WITH NAMES/DRUG/DOSE ON LABEL FOR CUSTOMS), GLASSES, AND OPTICAL GAS MASK INSERTS IF NEEDED.

(6) CONDUCT FHP/PM BRIEFING. THE UNIT FHP OFFICER SHOULD PROVIDE A PRE-DEPLOYMENT FHP BRIEFING. LARGER UNITS MAY ELECT TO OBTAIN THIS PRE-DEPLOYMENT BRIEFING FROM APPROPRIATELY TRAINED INDIVIDUALS (PREV MED OFFICERS, ENVIRONMENTAL HEALTH OFFICERS, INDUSTRIAL HYGIENIST OFFICERS, ETYMOLOGISTS, SENIOR ENLISTED PM TECHNICIANS OR SENIOR HMs). AT A MINIMUM, THE FOLLOWING TOPICS SHOULD BE COVERED: LOCAL FOOD AND WATER PRECAUTIONS, HAND-WASHING, PERSONAL HYGIENE MEASURES, USE OF PERSONAL PROTECTIVE SUPPLIES, MALARIA CHEMOPROPHYLAXIS, STD AVOIDANCE, INFECTIOUS DISEASE RISKS, ENVIRONMENTAL RISKS, SURFACE WATER AVOIDANCE, RABIES AVOIDANCE, SNAKE BITE TREATMENT GOALS, HEAT/WATER DISCIPLINE, INJURY AVOIDANCE (MOTOR VEHICLES, SPORTS ACTIVITIES), COMBAT STRESS CONTROL AND LEADERSHIP RESPONSIBILITIES TO ENFORCE PREVENTIVE MEASURES.

E. FHP PRIORITIES DURING DEPLOYMENT

(1) DEPLOY APPROPRIATE PM PERSONNEL AND EQUIPMENT. REVIEW THIS GUIDANCE AND FORCE LAYDOWN TO ENSURE APPROPRIATE PERSONNEL AND EQUIPMENT PLAN.

(2) PROVIDE SAFE FOOD, WATER, AND ICE. PROCURE ONLY US APPROVED FOOD AND WATER. OPERATE FOOD OPERATIONS IN ACCORDANCE WITH REF (M) CHAPTER 9 OR SERVICE SPECIFIC DIRECTIVES. DUE TO HIGHER RATES OF CONTAMINATED FOODS AND INADEQUATELY TREATED WATER IN THE AREA, AVOID ALL LOCAL FOOD, WATER, AND ICE UNLESS INSPECTED AND CERTIFIED BY US PREVENTIVE MEDICINE OR VETERINARY PERSONNEL.

(3) PROVIDE PROPER FIELD SANITATION/HYGIENE. ENSURE FIELD LATRINES ARE PROVIDED IN ACCORDANCE WITH REF (M) OR SERVICE DIRECTIVES. ENSURE PROPER HAND-WASHING FACILITIES NEAR ALL LATRINES AND FOOD SERVICE/DINING FACILITIES. ENFORCE HAND WASHING. ENSURE PROPER REMOVAL OF GARBAGE AND SOLID WASTE IN ACCORDANCE WITH SERVICE DIRECTIVES. ELIMINATE FOOD/WASTE SOURCES THAT ATTRACT PESTS IN LIVING AREAS.

(4) ENFORCE MALARIA CHEMOPROPHYLAXIS AS APPROPRIATE. FOR THOSE AT RISK AS NOTED IN PARAGRAPH 1D(4), PROVIDE LEADERSHIP SUPERVISION TO ENSURE MALARIA MEDICATION IS USED AS DIRECTED.

(5) ENFORCE PERSONAL PROTECTIVE MEASURES. THIS IS A CRITICAL COMMAND ACTIVITY, PERHAPS THE MOST IMPORTANT, IN PREVENTING VECTOR BORNE INFECTIONS SUCH AS MALARIA, DENGUE, JEV, AND SCRUB TYPHUS. WEAR PERMETHRIN TREATED UNIFORM WITH SLEEVES DOWN AND BOOTS BLOUSED. PROVIDE LEADERSHIP EMPHASIS ON THE USE OF DEET DAY AND NIGHT AS APPROPRIATE. IN FIELD SETTINGS, SLEEP UNDER PERMETHRIN TREATED MOSQUITO NETTING.

(6) CONDUCT VECTOR SURVEILLANCE AND CONTROL AS NEEDED.

(7) ENCOURAGE ABSTINENCE FROM SEXUAL CONTACT. ABSTINENCE IS THE ONLY GUARANTEED STD PREVENTION METHOD. IT IS RECOGNIZED THAT THIS ADVICE MAY BE IGNORED. IF SEXUALLY ACTIVE, MEMBERS ARE ADVISED TO USE LATEX (NOT NATURAL, OR SKIN) CONDOMS WITH THE CLEAR UNDERSTANDING THAT CONDOMS HAVE REPEATEDLY BEEN SHOWN TO FAIL IN PREVENTING STD'S

AND PREGNANCY. LEADERS SHOULD STRESS THE ASSOCIATION OF ALCOHOL CONSUMPTION AND SUBSEQUENT DECISIONS WITH SERIOUS NEGATIVE HEALTH CONSEQUENCES.

(8) CONDUCT ENVIRONMENTAL HAZARD ASSESSMENT AS NEEDED. MEDICAL PERSONNEL SUPPORTING EXERCISE UNITS ARE TASKED TO NOTIFY APPROPRIATE PM SUPPORT OF ANY ENVIRONMENTAL PROBLEMS NOTED NOT COVERED IN THIS GUIDANCE. UTILIZE UNIT PM TECHNICIANS (PMT'S) AS A FIRST RESOURCE. FOR PROBLEMS OF A SERIOUS NATURE OR THAT CANNOT BE EASILY SOLVED, NOTIFY THE III MEF PM OFFICER OR THE CTF SURGEON.

(9) MONITOR CLIMATIC CONDITIONS AND ENFORCE APPROPRIATE HOT/COLD WEATHER DISCIPLINE. THE KT CAN HAVE EXTREMELY HOT AND HUMID WEATHER MOST TIMES OF THE YEAR. FLUID REQUIREMENTS ARE GREATLY INCREASED. COMMANDERS ARE RESPONSIBLE FOR MONITORING WET-BULB GLOBE TEMPERATURE (WBGT) REPORTS TO ENSURE TRAINING ACTIVITY DOES NOT EXCEED MEDICAL ADVICE WITHOUT GOOD OPERATIONAL JUSTIFICATION. COMMANDERS ARE RESPONSIBLE FOR ENSURING ENFORCEMENT OF HYDRATION/WATER DISCIPLINE AND WORK/REST CYCLES.

(10) ENFORCE AWARENESS OF RABIES THREAT. RABIES IS A SIGNIFICANT PROBLEM IN THE KT. COMMANDERS WILL ENSURE STRAY ANIMALS ARE NOT "ADOPTED" BY UNIT PERSONNEL. NEITHER DOGS NOR CATS ARE AUTHORIZED IN TRAINING/LIVING/RECREATIONAL AREAS. IN CASES OF ANIMALS NOT RESPONDING TO EFFORTS TO "CHASE" AWAY OR ACTING IN AGGRESSIVE/UNUSUAL MANNERS, COORDINATION SHOULD BE MADE WITH HOST NATION (HN) MILITARY SUPPORT TO EFFECT SAFE ANIMAL REMOVAL. IMMEDIATE FIRST AID FOR ANIMAL BITES/SCRATCHES IS TO WASH WITH COPIOUS SOAP AND WATER FOR A MINIMUM OF 15 MINUTES. ALL BITES SHOULD BE BROUGHT TO IMMEDIATE MEDICAL ATTENTION.

(11) DEPLOYMENT HEALTH SURVEILLANCE. CONDUCT DISEASE AND NON-BATTLE INJURY (DNBI) SURVEILLANCE AS STATED IN COBRA COLD ANNEX Q. GENERALLY, ALL UNITS CAN EXPECT TO REPORT WEEKLY DNBI UTILIZING REF (N) TO THE CTF SURGEON. SYNDROMIC SURVEILLANCE AS REPORTED IN WEEKLY DNBI IS A KEY EARLY WARNING TOOL FOR IDENTIFICATION OF EPIDEMICS RESULTING FROM BIO-WARFARE, NATURAL DISEASE OUTBREAKS, OR POOR PM COMPLIANCE. IT IS ALSO A USEFUL TOOL IN IDENTIFYING THOSE UNITS IN NEED OF ADDITIONAL MEDICAL SUPPORT TO MEET MISSION GOALS. BESIDES DNBI REPORTING, ENSURE ALL REPORTABLE DISEASES ARE REPORTED EARLY TO THE CTF SURGEON.

(12) BEFORE LEAVING AOR. IAW REF E, CONDUCT POST-DEPLOYMENT HEALTH ASSESSMENT USING FORM DD-2796 WITHIN FIVE DAYS PRIOR TO RETROGRADE. FIND FORM DD-2796 AT  
AMSA.ARMY.MIL/DEPLOY\_SURV/DD2796\_POST\_DEPLOY.PDF.  
F. FHP PRIORITIES AFTER DEPLOYMENT.

(1) ENSURE COMPLETION OF POST-DEPLOYMENT HEALTH ASSESSMENT. IF UNABLE TO COMPLETE FORM DD-2796 BEFORE RETROGRADE, ENSURE COMPLETION WITHIN FIVE DAYS OF RETURN. FORWARD COMPLETED ORIGINAL FORMS TO ARMY MEDICAL SURVEILLANCE ACTIVITY (AMSA), ATTN: DEPLOYMENT SURVEILLANCE, BLDG. T-20, RM. 213 (MCHB-TS-EDM), 6825 16TH STREET, NW, WASHINGTON DC, 20307-5000. PLACE A COPY OF THE FORM IN MEMBER'S OUTPATIENT MEDICAL RECORD.

(2) CONDUCT POST-DEPLOYMENT SCREENING AND TESTING PER SERVICE-SPECIFIC, COMBATANT COMMAND, JOINT STAFF, OR OTHER COMMAND DIRECTIVES.

(3) ENSURE THAT ALL POST-DEPLOYMENT HEALTH ISSUES ARE ADDRESSED AND PROPERLY DOCUMENTED. ENSURE THAT ALL MEDICAL RECORDS COMPILED DURING DEPLOYMENT, INCLUDING COPIES OF DD FORMS 2795, 2796, AND SF-600'S ARE INCORPORATED INTO THE OUTPATIENT MEDICAL RECORD AND

THAT ORIGINALS OF FORMS 2795/98 ARE FORWARDED TO THE ARMY MEDICAL SURVEILLANCE ACTIVITY (AMSA). ENSURE THAT DD FORM 2768 IS UPDATED WITH DEPLOYMENT INFORMATION.

(4) SUPERVISE AND ENFORCE POST-EXPOSURE MALARIA CHEMOPROPHYLAXIS AS APPROPRIATE. CONTINUE APPROPRIATE CHEMOPROPHYLAXIS AFTER DEPARTURE AS PER PRESCRIBING REFERENCES (DOXY CONTINUES FOR 28 DAYS). IF PROPHYLAXIS IS INDICATED, BEGIN PRIMAQUINE ON DAY OF DEPARTURE, 26.3MG(15MG BASE) PER DAY FOR 14 DAYS, UNLESS G-6PD DEFICIENT OR PREGNANT. FAILURE TO ENFORCE POST-EXPOSURE PROPHYLAXIS GREATLY INCREASES THE RISK OF P. VIVAX MALARIA INFECTION IN THE MONTHS AFTER DEPLOYMENT.

(5) CONDUCT POST-DEPLOYMENT PM BRIEFING. UPON RETURN FROM DEPLOYMENT, ENSURE ALL DEPLOYERS ARE ADVISED OF ANY KNOWN HEALTH ISSUES NOTED DURING THE DEPLOYMENT. THOSE MEMBERS WITH MEDICAL CONCERN'S AFTER DEPLOYMENT SHALL HAVE THESE ISSUES ADDRESSED AS OUTLINED BY THE POST-DEPLOYMENT HEALTH WEBSITE MAINTAINED BY THE DOD AND VA. FIND GUIDELINES AT [WWW.PDHEALTH.MIL/508/CLINICIANS/PDHEM/FRAMESET.HTM](http://WWW.PDHEALTH.MIL/508/CLINICIANS/PDHEM/FRAMESET.HTM).

2. ENVIRONMENTAL HEALTH RISK ASSESSMENT (ERHA). FHP OFFICERS, PM OR MEDICAL PERSONNEL ARE RESPONSIBLE FOR BRIEFING DEPLOYING PERSONNEL ON ENVIRONMENTAL HEALTH FACTORS AND RISKS IN THE KT. A. KEY JUDGMENTS. THE GREATEST ENVIRONMENTAL HEALTH RISKS ARE ASSOCIATED WITH HIGH HEAT/DEHYDRATION, TRAUMA, RAW SEWAGE/RUNOFF WITH FECAL PATHOGENS, AND SNAKEBITES.

B. PHYSICAL ENVIRONMENT. THE KT IS SLIGHTLY LARGER THAN CALIFORNIA BEING 197,594 SQUARE MILES. IT'S FIVE GEOGRAPHIC REGIONS ARE:

(1) SOUTHEAST COAST: A LOW FERTILE PLAIN SEPARATED FROM THE CENTRAL VALLEY BY LOW MOUNTAINS.

(2) NORTHEAST PLATEAU (KORAT OR NAKHON RATCHISMA PLATEAU); BORDERING LAOS AND CAMBODIA, THIS REGION IS AN UNDULATING TABLELAND VARYING BETWEEN 400-700 FEET.

(3) NORTHERN AND WESTERN MOUNTAINS: A REGION WITH ELEVATIONS UP TO 8,500 FT. IT HAS BEEN SUBJECTED TO WIDESPREAD DEFORESTATION.

(4) CENTRAL BASIN: ENCOMPASSING 25% OF THE LAND AREA, IT IS THE MOST HEAVILY POPULATED AND DOMINATES THE COUNTRY ECONOMICALLY.

(5) PENINSULAR THAILAND: OCCUPIES THE NORTHERN MALAY PENINSULA BETWEEN BURMA AND MALAYSIA.

C. CLIMATE.

(1) TEMPERATURE. THE CLIMATE IN THE KT IS MOSTLY TROPICAL MONSOONAL WITH FOUR DISTINCT SEASONS: DRY (JAN-FEB), HOT (MAR-MAY), WET (MAY-OCT), AND COOL (NOV-DEC). FAHRENHEIT TEMPERATURE RANGES IN BANGKOK ARE AS FOLLOWS:

MONTH JA FE MR AP MY JN JL AG SP OC NV DC  
MAX 90 91 93 93 93 91 91 90 90 88 73 70  
MIN 68 72 75 77 77 77 75 75 75 75 73 70

(2) HEAT INJURIES. HIGH HEAT AND HUMIDITY IS A SIGNIFICANT MEDICAL THREAT IN THE KT. GREATEST RISK OCCURS DURING THE EARLY PARTS OF DEPLOYMENT. SIGNIFICANT HEAT CASUALTIES HAVE SERIOUSLY IMPACTED PAST COBRA GOLD EXERCISES. HEAT CASUALTIES CAN BE REDUCED AND PREVENTED BY EFFECTIVE EDUCATION/TRAINING, INCREASED COMMAND/PERSONNEL ATTENTION TO HYDRATION AND FITNESS HABITS BEGINNING IN THE PRE-EXERCISE PERIOD. COMMANDERS SHOULD ALLOW FOR ACCLIMATIZATION AND ENFORCE WATER DISCIPLINE, PERSONAL HYDRATION. WBGT'S GREATER THAN 85F SHOULD RESULT IN MINIMIZED STRENUOUS PHYSICAL ACTIVITY IF NOT ACCLIMATED TO HOT WEATHER FOR AT LEAST 3

WEEKS. WBGT'S GREATER THAN 90F SHOULD CURTAIL ALL NON-ESSENTIAL STRENUOUS ACTIVITIES. COLOR OF URINE IS A GOOD GUIDE TO HYDRATION STATUS. DARK OR MEDIUM DARK YELLOW URINE INDICATES 1-2 CANTEENS (QUARTS) OF WATER SHOULD BE CONSUMED IMMEDIATELY. IN HOT ENVIRONMENTS, UNIT LEADERS SHOULD MONITOR PERSONNEL FOR CRAMPS, EXCESSIVE PROFUSE SWEATING, LACK OF APPROPRIATE SWEATING, PALE/MOIST SKIN, DIZZINESS, NAUSEA, RED FLUSHED/HOT SKIN OR ALTERED MENTAL STATUS. FIRST AID FOR HEAT CASUALTIES PENDING TRANSPORT TO MEDICAL OR ARRIVAL OF MEDICAL ASSISTANCE IS TO REMOVE GEAR/BLOUSE, EXPOSE EXTREMITIES, PLACE IN SHADE, POOR COOL WATER OVER EXPOSED BODY AND SEND FOR HELP. CASUALTIES WHO ARE AWAKE/COHERENT SHOULD CONSUME COOL WATER. RISK OF HEAT INJURY IS INCREASED BY INADEQUATE BREAK PERIODS, INSUFFICIENT FLUID CONSUMPTION, POOR PRE-EXERCISE FITNESS, AND THE USE OF SEVERAL SPECIFIC MEDICATIONS (ANTIHISTAMINES AND BLOOD PRESSURE MEDICATIONS).

(3) RAINFALL VARIES ANNUALLY BETWEEN 40 INCHES IN THE NORTHERN HIGHLANDS AND KORAT PLATEAU TO 120 INCHES IN THE WESTERN MOUNTAINS AND SOUTHERN PENINSULA. HEAVY RAINS ASSOCIATED WITH THE SEMI-ANNUAL TYPHOON SEASON CAUSE FREQUENT FLOODING. LATE SUMMER TO EARLY FALL HAS OVER THE LAST SEVERAL YEARS SEEN SEVERAL HUNDRED DEATHS ACROSS THAILAND FROM FLASH FLOODING. MEAN MONTHLY PRECIPITATION IN INCHES FOLLOWS:

MONTH JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Avg 0.4 1.0 1.4 3.3 6.0 6.1 6.7 7.0 11.9 9.4 2.3 0.3

D. MOTOR VEHICLE ACCIDENTS (MVA) AND TRAUMA. MVA'S HISTORICALLY ARE THE MOST LIKELY CAUSE OF SIGNIFICANT TRAUMA, DISABILITY, AND LOSS OF LIFE ON DEPLOYMENTS OR WHEN TRAVELING OVERSEAS. KT ROADS ARE NOTORIOUSLY CROWDED AND DANGEROUS. DRIVER BEHAVIOR STANDARDS ARE DIFFERENT THAN EXPECTED IN THE U.S. DRIVING ON KT PUBLIC ROADS IS NOT AUTHORIZED EXCEPT FOR SPECIFIC OFFICIAL VEHICLE MISSIONS VERIFIED BY COMMANDER. ATTENTION TO SAFE SPEEDS AND SEAT BELTS IS MANDATORY. SIMILAR ATTENTION TO SAFETY IS REQUIRED OPERATING MOTOR VEHICLES ON ROYAL THAI MILITARY INSTALLATIONS. BETWEEN 1989-1995, WHO REPORTS THE KT MVA FATALITIES WERE BETWEEN 12-28 PER 100,000 POPULATION.

E. ENVIRONMENTAL CONTAMINATION. BECAUSE OF EXTENSIVE GROWTH OVER THE LAST 40 YEARS, THE KT IS NOW FACED WITH SEVERAL ENVIRONMENTAL CHALLENGES (AIR POLLUTION IN BANGKOK, INDUSTRIAL WASTE, AND THREATENED FRESHWATER RESOURCES). THE KT IS WORKING TO DEVELOP MORE EFFECTIVE ENVIRONMENTAL REGULATION. ACCORDING TO WHO DATA, SINCE 1990, ENVIRONMENTAL HEALTH INDICATORS (SAFE WATER AND SEWAGE MANAGEMENT) HAVE STEADILY IMPROVED. POTENTIAL ENVIRONMENTAL CONTAMINATION SOURCES INCLUDES AGRICULTURE, CHEMICAL PLANTS, COAL-FIRED POWER PLANTS, MINING (TUNGSTEN/TIN), MOTOR VEHICLES, SHIPYARDS, ELECTRONICS PRODUCTION, FERTILIZERS, FOOD/BEVERAGES, PLASTIC/RUBBER, TEXTILES, AND WOOD PRODUCTS. THE CENTRAL REGION OF THAILAND (INCLUDING BANGKOK) CONTAINS MORE THAN HALF OF THE INDUSTRY OF THAILAND.

F. AIR CONTAMINATION. URBAN AIR POLLUTION IS THAILAND'S MOST SEVERE ENVIRONMENTAL PROBLEM. URBAN AIR CONTAINS HIGH LEVELS OF SUSPENDED PARTICULATE MATTER FROM VEHICLE TRAFFIC, INDUSTRY, CONSTRUCTION, AND OPEN-AIR BURNING. MOST CONCERN IS IN THE HIGHLY DEVELOPED BANGKOK REGION BUT KORAT (NAKHON RATCHASIMA) HAS SIMILAR AIR QUALITY ISSUES. OZONE, CARBON MONOXIDE, AND PARTICULATES MAY EXCEED US EPA AIR QUALITY STANDARDS. HIGHEST CONCENTRATIONS OF OZONE OCCUR DURING THE HOT SUMMER MONTHS. HIGH CONCENTRATIONS OF PARTICULATE POLLUTION ALSO

OCCURS IN CHIANG MAI. SHORT-TERM EXPOSURE TO NITROGEN OXIDES, OZONE, PARTICULATE MATTER, AND SULFUR DIOXIDE ABOVE ESTABLISHED STANDARDS PRESENTS A RISK OF TRANSIENT ACUTE RESPIRATORY SYMPTOMS SUCH AS COUGHING, WHEEZING, AND REDUCED LUNG FUNCTION, ESPECIALLY IN ASTHMATIC INDIVIDUALS.

G. FOOD CONTAMINATION. SPECIFIC INFORMATION ON CHEMICAL CONTAMINATION OF FOOD PRODUCTS IS UNAVAILABLE FOR THE KT. IN GENERAL, LOW-LEVEL CHEMICAL CONTAMINATION OF FOOD IS A CONCERN ONLY FOR LONG-TERM EXPOSURES. CONTAMINATION OF FOOD WITH FECAL PATHOGENS MAY RESULT FROM USE OF FERTILIZERS DERIVED FROM HUMAN OR ANIMAL WASTE, UNSANITARY FOOD PREPARATION TECHNIQUES, AND IMPROPER HANDLING OF PREPARED FOOD PRODUCTS. EVEN A ONE-TIME EXPOSURE TO FECAL CONTAMINATION IN FOOD MAY CAUSE SEVERE ACUTE INTESTINAL INFECTIONS.

H. SOIL CONTAMINATION. MOST INDUSTRIAL WASTE IS DUMPED IN UNREGULATED LANDFILLS, ON PRIVATE PROPERTY, OR AT SEA. ONLY ABOUT 10-20% OF TOXIC WASTE IS PROPERLY DISPOSED OF. MANY FACTORIES PRODUCING CHEMICAL WASTE ARE IN THE BANGKOK AREA. DOMESTIC WASTE ALSO IS POORLY MANAGED. USE OF INDISCRIMINATE PESTICIDES, HERBICIDES, AND FUNGICIDES HAS INCREASED DRAMATICALLY IN THAILAND IN THE LAST 30 YEARS. SOILS OF NORTHERN THAILAND CONTAIN DDT, LINDANE, AND ORGANOCHLORINE PESTICIDE RESIDUES. GOVERNMENT PROGRAMS ARE PROGRESSIVELY RESTRICTING PESTICIDES. SPECIFIC INFORMATION REGARDING SOIL CONTAMINATION IS NOT AVAILABLE FOR THAILAND. IN GENERAL, SOIL CONTAMINATION IS LOCALIZED TO SPECIFIC AREAS SURROUNDING INDUSTRIAL FACILITIES OR AGRICULTURAL AREAS WITH HEAVY PESTICIDE USE, AND WASTE DISPOSAL SITES. EXPOSURE TO CONTAMINANTS IN SOIL IS LIKELY TO BE MINIMAL IN THE ABSENCE OF WIND-BLOWN DUST, ACTIVE DIGGING, OR MIGRATION OF CONTAMINANTS FROM SOIL INTO GROUND WATER. SINCE CONTAMINATION IS LOCALIZED AND EXPOSURE IS OFTEN AVOIDABLE, SOIL CONTAMINATION USUALLY PRESENTS A LOW RISK TO HUMAN HEALTH.

I. WATER CONTAMINATION. UNTREATED DOMESTIC AND INDUSTRIAL WASTES AND OTHER NON-POINT SOURCES OF CONTAMINATION DEGRADE WATER QUALITY IN BOTH RURAL AND URBAN THAILAND. RUN-OFF FROM LIVESTOCK FARMS AND AGRICULTURAL AREAS ARE SIGNIFICANT SOURCES OF WATER POLLUTANTS. ALSO CONTRIBUTING TO SIGNIFICANT SURFACE WATER POLLUTIONS ARE PRODUCERS OF IRON/STEEL, PULP/PAPER, DAIRY, FISH, SUGAR/REFINERIES, AND DISTILLED SPIRITS. CONSUMPTION OF WATER CONTAMINATED WITH RAW SEWAGE OR RUNOFF CONTAINING FECAL PATHOGENS OFTEN CAUSES SEVERE ACUTE ENTERIC INFECTIONS. SEE PARAGRAPH 3 INFECTIOUS DISEASE RISK ASSESSMENT FOR DETAILS.

J. HAZARDOUS ANIMALS. DOGS/SNAKES ARE THE MAIN ANIMAL RISKS.

(1) SNAKES. THERE IS SIGNIFICANT SNAKEBITE RISK IN THE KT. THERE ARE THREE FAMILIES OF SNAKES OF CONCERN IN THE KT, COLUBRIDAE (BACK-FANGED SNAKES), ELAPIDAE (VENOMOUS SNAKES WITH ANTERIOR FIXED GROOVED FANGS) AND VIPERIDAE (PIT VIPERS WITH LONG HINGED FANGS). (A) THE PRIMARY COLUBRID IN THE KT IS THE RED NECKED KEELBACK WITH A HEMOTOXIC VENOM. THERE IS NO ANTIVENIN.

(B) ELAPIDAE ARE COMPRISED OF A NUMBER OF SPECIES. THE FIRST ARE VARIOUS KRAITS (MALAYAN, BANDED, RED-HEADED, AND YELLOW-HEADED). KRAITS ARE TIMID AND USUALLY ONLY BITE WITH PROVOCATION. KRAIT VENOM IS A NEUROTOXIN (RESPIRATORY PARALYSIS IS A PRIMARY CONCERN) WITH OCCASIONAL ASSOCIATED FATALITIES. THE NEXT GROUP OF ELAPIDAE IN THE KT ARE THE CORAL SNAKES (ASIATIC, BLUE LONG-GLANDED, BANDED LONG-GLANDED), THERE ARE FEW BITES AND THE VENOM IS THOUGHT TO BE A NEUROTOXIN WITH A SMALL NUMBER OF FATALITIES ASSOCIATED. THE MOST NOTORIOUS ELAPIDAE ARE THE COBRAS (MONOCELLATE COBRA, THAI 'SPITTING

COBRA,' SUMATRAN 'SPITTING' COBRA, AND THE KING COBRA). MOST WILL GENERALLY NOT STRIKE UNLESS PROVOKED OR HAVE THEIR TERRITORY INADVERTENTLY ENTERED. STRIKES CAN BE PERSISTENT WITH SAVAGE CHEWING. ALL HAVE A POTENT NEUROTOXIN AND HIGH MORTALITY RATE - OFTEN FROM RESPIRATORY FAILURE. THE TWO 'SPITTING' COBRAS HAVE A WELL-DEVELOPED CAPABILITY TO 'SPIT' VENOM SEVERAL FEET, OFTEN ACCURATELY AIMING FOR THE EYES. IF VENOM ENTERS EYES, IT MAY CAUSE PERMANENT BLINDNESS. IF VENOM IS 'SPIT' INTO EYES, FLUSH EYES WITH COPIOUS WATER AS SOON AS POSSIBLE AFTER SLOWLY BACKING AWAY FROM THE COBRA AND SEEK IMMEDIATE MEDICAL ATTENTION.

(C) THE FINAL FAMILY OF VENOMOUS SNAKES IN THE KT ARE PIT VIPERS (MALAYAN, RUSSELL'S, MOUNTAIN, WHITE-LIPPED GREEN, KANCHANABURI, DARK-GREEN, POPE'S, FLAT NOSED, CHINESE BAMBOO, MANGROVE, SUMATRAN, AND WAGLER'S). SOME ARE HIGHLY AGGRESSIVE AND QUICK TO STRIKE IF DISTURBED. MANY HAVE POTENT HEMOTOXINS (BLEEDING AND SHOCK). DEATHS HAVE BEEN REPORTED.

(D) ALL SNAKEBITES SHOULD BE EVACUATED TO HIGHER-LEVEL CARE IMMEDIATELY AFTER WRAPPING WITH A COMPRESSION DRESSING (ACE WRAP THE AREA ABOVE AND BELOW THE SNAKEBITE). DO NOT USE TOURNIQUETS, DO NOT CUT//INCISE BITES, AND DO NOT SUCK ON WOUND. GOAL IS TO MINIMIZE SPREAD OF VENOM BUT NOT CUT OFF CIRCULATION THAT COULD LEAD TO LIMB AMPUTATION. MONITOR VICTIM FOR RESPIRATORY DISTRESS. WHILE NOT ALL SNAKE BITES RESULT IN ENVENOMATION, BE PREPARED TO PERFORM CPR EN ROUTE TO HIGHER LEVEL CARE. AFTER BITES, CONTACT PARAGRAPH 4 KT JUSMAGTHAI TRICARE//ISOS OFFICER TO OBTAIN ANTIVENIN SUPPORT. USE OF ANTIVENIN REQUIRES EDUCATION, TRAINING AND THE APPROPRIATE ANTIVENIN FOR THE SPECIFIC SNAKEBITE. DO NOT ATTEMPT TO CAPTURE SNAKE BUT DO ATTEMPT TO ACCURATELY DESCRIBE SNAKE. MEDICAL PERSONNEL IN ISOLATED REGIONS ARE ENCOURAGED TO REVIEW SNAKEBITE FIRST-AID PROCEDURES AND COORDINATE AVAILABILITY OF ANTIVENIN WITH THE JUSMAGTHAI TRICARE//ISOS OFFICER WHO CAN ALSO FACILITATE CONSULTATIONS WITH LOCAL MEDICAL EXPERTS.

(2) DOG BITES. SEE PARAGRAPHS 1E(10) AND 3E(1)(A).

### 3. INFECTIOUS DISEASE RISK ASSESSMENT.

A. KEY JUDGMENTS. AFMIC ASSESSES THE THAILAND AS A HIGH-RISK COUNTRY FOR MANY INFECTIOUS DISEASES. WITHOUT FORCE HEALTH PROTECTION MEASURES, MISSION EFFECTIVENESS WILL BE SERIOUSLY JEOPARDIZED. MOST INFECTIONS ARE PREVENTABLE BY USING APPROVED FOOD/WATER, WASHING HANDS FREQUENTLY, AND USING PPS. IN TERMS OF SIGNIFICANCE, THE HIGHEST RISK OF INFECTIOUS DISEASES IN THE KT ARE FOOD/WATERBORNE DISEASES (HIGH NUMBERS OF BACTERIAL DIARRHEA), VECTOR-BORNE DISEASES (DENGUE, MALARIA, AND JAPANESE ENCEPHALITIS, ALL CAPABLE OF PRODUCING SERIOUS DISEASE), STD'S (HEPATITIS B, POSSIBLY IMPACTING MISSION OR PLACING LONG-TERM HEALTH AT RISK), AND RABIES (LIFE THREATENING).

B. FOODBORNE AND WATERBORNE DISEASES. SANITATION IS POOR THROUGHOUT THE KT, INCLUDING MAJOR URBAN AREAS. LOCAL FOOD AND WATER SOURCES (INCLUDING ICE) MAY BE HEAVILY CONTAMINATED WITH PATHOGENIC BACTERIA, PARASITES, AND VIRUSES TO WHICH MOST US SERVICE MEMBERS HAVE LITTLE NATURAL IMMUNITY. DIARRHEAL DISEASES CAN INCAPACITATE A HIGH PERCENTAGE OF PERSONNEL WITHIN ONLY A FEW DAYS IF LOCAL FOOD, WATER, OR ICE IS CONSUMED. HEPATITIS A AND TYPHOID CAN CAUSE PROLONGED SEVERE ILLNESS.

(1). FOODBORNE AND WATERBORNE DISEASES OF GREATEST RISK.

(A) BACTERIAL DIARRHEA. HISTORICALLY, OVER 50% OF UNIT STRENGTH PER

MONTH CONSUMING LOCAL FOOD, WATER, OR ICE CAN DEVELOP SYMPTOMATIC INFECTION. MILD DISEASE IS USUALLY TREATED IN OUTPATIENT SETTINGS. RETURN TO DUTY IN LESS THAN 72 HOURS WITH APPROPRIATE ANTIBIOTIC THERAPY IS COMMON. RISK IS COUNTRYWIDE, YEAR-ROUND. SYMPTOMS CAN BE EXPECTED 1-3 DAYS AFTER CONSUMPTION. THE MOST COMMON AGENTS OF "TRAVELERS DIARRHEA" ARE ENTEROTOXIGENIC E. COLI, CAMPYLOBACTER, SHIGELLA, AND SALMONELLA. NEARLY 900,000 CASES OF ACUTE DIARRHEA WERE REPORTED IN 1999 FROM THE THAI HEALTH CARE SYSTEM, WHICH TYPICALLY REPORTS ONLY THE MORE SEVERE CASES. IN 1996, 40% OF US TROOPS PARTICIPATING IN EXERCISES IN THAILAND EXPERIENCED ACUTE DIARRHEAL DISEASE. CAMPYLOBACTER WAS THE LEADING CAUSE OF DIARRHEA AMONG US FORCES IN THAILAND IN THE 1990'S (COBRA GOLD 1998 - 15% OF POSITIVE FECAL CULTURES WERE IDENTIFIED AS CAMPYLOBACTER). CAMPYLOBACTER RESISTANCE HAS BEEN REPORTED TO FLUOROQUINOLONES, MACROLIDES, TETRACYCLINES, AND TMP/SMX. REPORTED RESISTANCE RATES IN 2000 WERE 87% TO CIPROFLOXACIN AND 1% TO ERYTHROMYCIN/AZITHROMYCIN. MANY OTHER PATHOGENS (VIBRIO, SHIGELLA, AND SALMONELLA) WERE SENSITIVE.

(B) HEPATITIS A VIRUS (HAV), POTENTIALLY 2-10% PER MONTH OF UNVACCINATED PERSONNEL CONSUMING LOCAL FOOD, WATER, OR ICE COULD DEVELOP SYMPTOMATIC INFECTION. A TYPICAL CASE INVOLVES 1-3 WEEKS OF DEBILITATING SYMPTOMS. RETURN TO DUTY MAY REQUIRE A MONTH. RISK IS COUNTRYWIDE YEAR-ROUND. DISEASE USUALLY PRESENTS 28-30 DAYS AFTER EXPOSURE. HAV ANTIBODY PREVALENCE AMONG CHILDREN AND ADOLESCENTS HAS DECLINED IN URBAN AREAS SUCH AS BANGKOK WHERE SANITARY CONDITIONS HAVE IMPROVED.

(C) FOOD/WATERBORNE DISEASES OF POTENTIAL RISK. THE FOLLOWING INFECTIONS ARE THOUGHT TO BE LOW OR POORLY QUANTIFIED RISKS IN THE KT. AS NEEDED, CONSULT APPROPRIATE MEDICAL GUIDANCE AND REFS FOR ADDITIONAL INFORMATION. BRUCELLOSIS AND AMEBIC DYSENTERY - 1% OR LESS OF UNIT PERSONNEL MIGHT BE AFFECTED. CHOLERA - THERE IS NO RECENT REPORTING FOR CHOLERA IN THAILAND. HEPATITIS E/TYPHOID/PARATYPHOID MAY OCCUR IN SPORADIC OR INFREQUENT CASES. IN 1998, THE KT REPORTED 14,527 CASES OF TYPHOID, 50,416 AMEBIASIS/BACILLARY DIARRHEA CASES, AND 102,454 CASES OF FOOD POISONING. UNDER REPORTING IS ASSUMED.

C. VECTOR-BORNE DISEASES

(1) VECTOR-BORNE DISEASES OF GREATEST RISK. ECOLOGICAL CONDITIONS IN BOTH RURAL AND URBAN AREAS SUPPORT LARGE POPULATIONS OF MOSQUITOES, TICKS, MITES AND FLEAS. DENGUE FEVER AND MALARIA ARE THE MAJOR VECTOR-BORNE RISKS IN THE THAILAND. THEY ARE CAPABLE OF DEBILITATING A HIGH PERCENTAGE OF PERSONNEL FOR UP TO A WEEK OR MORE. OTHER VECTOR-BORNE DISEASES WITH THE CAPABILITY TO INCAPACITATE LARGE GROUPS OF PERSONNEL SUCH AS JAPANESE ENCEPHALITIS ALSO OCCURS AT SIGNIFICANT LEVELS.

(A) DENGUE FEVER. POTENTIALLY 11-50% PER MONTH OF PERSONNEL EXPOSED TO MOSQUITOES COULD DEVELOP SYMPTOMATIC INFECTION. DENGUE CAN BE A DEBILITATING FEBRILE ILLNESS REQUIRING 1-7 DAYS OF INPATIENT CARE, FOLLOWED BY RETURN TO DUTY. DENGUE FEVER IS FIRMLY ESTABLISHED IN THE KT AT HIGH LEVELS. THOUGH REPORTING IS INCOMPLETE, THE KT MINISTRY OF PUBLIC HEALTH REPORTED OVER 100,000 DENGUE CASES AND 216 DEATHS IN 2001. JANUARY THROUGH MARCH 2002 TOTALS WERE SLIGHTLY ABOVE THE SAME PERIOD OF 2001. IN JAN 2003, THAI AUTHORITIES REPORTED 800 DENGUE CASES IN THE BANGKOK REGION. INCREASED RATES TEND TO OCCUR EVERY 2 TO 3 YEARS WITH THE LAST PEAK IN 2002. RISK IS COUNTRYWIDE (INCLUDES AREAS FREE OF MALARIA) YEAR-ROUND. RISK MAY

BE HIGHER IN URBAN OR DENSELY POPULATED AREAS DUE TO BREEDING PATTERNS OF THE USUAL VECTOR (DAY-BITING AEDES MOSQUITOES). AEDES TENDS TO FLOURISH IN URBAN FLOWER POTS AND TIRES. THEY CAN ALSO BE FOUND IN RURAL AREAS. DISEASE USUALLY PRESENTS 4-7 DAYS AFTER BEING BITTEN. THE PRINCIPAL RESERVOIR FOR DENGUE IS MAN.

(B) MALARIA. POTENTIALLY 2-10% PER MONTH OF UNPROTECTED PERSONNEL EXPOSED TO MOSQUITOES COULD DEVELOP SYMPTOMATIC INFECTION. MALARIA IS A DEBILITATING FEBRILE ILLNESS TYPICALLY REQUIRING 1-7 DAYS OF INPATIENT CARE, FOLLOWED BY RETURN TO DUTY. FALCIPARUM CASES MAY CAUSE FATALITIES OR REQUIRE INTENSIVE CARE/PROLONGED CONVALESCENCE. THE MAIN SUBTYPES OF MALARIA REPORTED IN THE KT ARE P. FALCIPARUM (51-56%) AND P. VIVAX (44-48%). RISK IS YEAR-ROUND BUT Elevated DURING THE WARMER, WETTER MONTHS, IN THE RAINFORESTS OF WESTERN THAILAND, AND ALONG THE THAI-BURMA BORDER. PEAK TRANSMISSION OCCURS MAY-AUG, AND NOV-JAN. RISK IS PRIMARILY RURAL (FORESTED FOOTHILLS, JUNGLE AREAS). THERE IS Elevated RISK NEAR THE SOUTHEASTERN (CAMBODIAN), WESTERN (BURMESE), AND SOUTHERN (MALAYSIAN) BORDERS. URBAN CENTERS/TOURIST RESORTS OF BANGKOK, CHIANG MAI, SAMUI, SONGHLA, PATTAYA, AND PHUKET, ARE REPORTED RISK FREE. MALARIA IS CONSIDERED MODERATELY TO HIGHLY ENDEMIC IN BORDER AREAS, WITH HIGHEST INCIDENCE IN 1994 REPORTED (IN DESCENDING ORDER) FROM THE BORDER PROVINCES OF MAE HONG SON, TRAT, TAK, KANCHANABURI, RANONG, CHANTHABURI, YALA, RATCHABURI, PHRAE, AND PRACHUAP KHIRI KHANAND. REFER TO REF B THAILAND MALARIA LINKS FOR A DETAILED MAP SHOWING RISK AREAS. DISEASE USUALLY APPEARS 7-14 DAYS AFTER BEING BITTEN BY RURALLY ASSOCIATED EVENING/NIGHT-BITING ANOPHELES MOSQUITOES. IN 2000 THERE WERE 91,703 NEW MALARIA CASES REPORTED IN THE KT BY THE WHO. INCIDENCE HAS BEEN DROPPING WITH CASES OF P. FALCIPARUM DECLINING FROM 349,000 TO 50,512 BETWEEN 1988 AND 1997. HOWEVER, BETWEEN OCTOBER 1997 AND JULY 1998, THE INCIDENCE OF MALARIA IN THE SOUTHERN PROVINCES OF KRABI, NAKHON SRI THAMMARAT, AND SURAT THANI REPORTEDLY INCREASED SIGNIFICANTLY. A DECLINE IN MALARIA CONTROL PROGRAMS WAS REPORTEDLY THE CAUSE OF THE INCREASED INCIDENCE. FALCIPARUM STRAINS ARE REPORTED RESISTANT TO CHLOROQUINE (95%), HALOFANTRINE (35%), MEFLOQUINE (62%), QUININE (50%), FANSIDAR (80%) AND MANY OTHER DRUG COMBINATIONS. VIVAX STRAINS REMAIN SENSITIVE TO CHLOROQUINE. P. VIVAX RELAPSES HAVE BEEN REPORTED AFTER STANDARD PRIMAQUINE TREATMENT (9%).

(C) JAPANESE ENCEPHALITIS VIRUS (JEV). POTENTIALLY AS HIGH AS 1% PER MONTH OF PERSONNEL EXPOSED TO MOSQUITOES COULD DEVELOP SYMPTOMATIC JEV INFECTION REQUIRING HOSPITALIZATION OVER 7 DAYS, OFTEN INCLUDING INTENSIVE CARE. THE CASE FATALITY RATE IS 5-10% OR HIGHER. NEUROLOGIC SEQUELAE MAY PRECLUDE RETURN TO DUTY. A NATIONAL JEV CHILDHOOD IMMUNIZATION PROGRAM WAS INITIATED IN THE KT IN 1990. RISK REMAINS HIGH FOR ALL NON-IMMUNIZED PERSONNEL. RISK IS YEAR-ROUND BUT Elevated DURING THE WARMER, WETTER MONTHS (MAY-OCT), WITH CASE TOTALS PEAKING IN JULY. RISK IS PRIMARILY RURAL AND INCLUDES CHIANG MAI AND BANGKOK SUBURBS. CDC ASSESSES AN INCREASED PRESENCE IN NORTH WITH ANNUAL OUTBREAKS IN CHIANG MAI. IT IS CONSIDERED SPORADICALLY ENDEMIC IN THE SOUTH. THE RISK IS Elevated IN RURAL REGIONS, ESPECIALLY WHERE EXTENSIVE MOSQUITO-BREEDING SITES AND PIG-REARING AREAS COEXIST. DISEASE TYPICALLY DEVELOPS 5-15 DAYS AFTER BEING BITTEN BY NIGHT BITING CULEX MOSQUITOES. THE PRINCIPLE RESERVOIR IS DOMESTIC PIGS AND MIGRATORY WATERFOWL. APPROXIMATELY 99 PERCENT OR MORE OF HUMAN INFECTIONS ARE ASYMPTOMATIC. OUTBREAKS OCCUR ANNUALLY, WITH MOST CASES OCCURRING AMONG THOSE UNDER 15 YEARS

OLD. THE HIGHEST RISK OCCURS IN THE CHIANG MAI VALLEY. SPORADIC CASES ARE REPORTED IN BANGKOK. ALTHOUGH SOME TRAVEL GUIDES ADVISE JEV VACCINATION ONLY FOR VISITS GREATER THAN ONE MONTH, IN SHORTER RURAL VISITS WITH EXTENSIVE OUTDOOR EXPOSURE, VACCINATION IS USUALLY ADVISED. REF I ALSO REQUIRES NAVY/MARINE VACCINATION FOR JEV IF IN ENDEMIC REGIONS WITH FIELD SCENARIOS.

(D) FILARIASIS. A MOSQUITO BORNE DISEASE. THE KT IS IN A WHO FILARIASIS ENDEMIC ZONE. ELEPHANTIASIS CAN RESULT FROM FILARIASIS INFECTION. SYMPTOMS CAN TAKE FIVE YEARS TO DEVELOP. THAILAND HAS MADE GOOD PROGRESS IN DECREASING THE FILARIASIS RISK WITH RATES DROPPING BETWEEN 1992-1998 FROM 8.46 TO 1.45 PER 100,000 POPULATION. PROBLEM REGIONS WITH W. BANCROFTI AND B. MALAYI REMAIN ON THE THAI-BURMA BORDER AND THAI-MALAYA BORDER.

(2) VECTOR-BORNE DISEASES OF POTENTIAL RISK. THE VECTOR-BORNE DISEASES OF CHIKUNGUNYA FEVER (MOSQUITOES) AND EHRLICHIOSIS (TICKS) CAN OCCUR AT UNKNOWN LEVELS. SCRUB TYPHUS (MITE) CAN OCCUR AT UP TO 1% OF PERSONNEL PER MONTH. SPORADIC OR INFREQUENT CASES OF MURINE TYPHUS (FLEA BORNE) CAN OCCUR.

D. SEXUALLY TRANSMITTED DISEASES

(1) SEXUALLY TRANSMITTED DISEASES OF GREATEST RISK.

POVERTY AND OTHER FACTORS RESULTS IN A GREAT NUMBER OF COMMERCIAL SEX WORKERS (CSW) IN THE KT. CARRIER RATES FOR HEPATITIS B IN CSW ARE HIGH. IN ADDITION, SOUTHEAST ASIA IS EXPERIENCING AN EPIDEMIC OF HIV/AIDS IN CSWS. OTHER DISEASES THAT ARE COMMON IN CSW INCLUDE GONORRHEA, CHLAMYDIA, CHANCRON, HERPES, LYMPHOGRANULOMA VENEREUM, SYPHILIS, AND VENEREAL WARTS.

(A) HEPATITIS B VIRUS (HBV). POTENTIALLY AS HIGH AS 1% PER MONTH OF PERSONNEL HAVING UNPROTECTED SEXUAL CONTACT COULD BECOME INFECTED. A TYPICAL CASE INVOLVES 1 TO 3 WEEKS OF DEBILITATING SYMPTOMS. RETURN TO DUTY MAY REQUIRE A MONTH OR MORE. CHRONIC INFECTION WITH LIVER DAMAGE MAY OCCUR. DISEASE USUALLY APPEARS 60-90 DAYS AFTER EXPOSURE. HBV CARRIER RATES IN THE KT ARE ABOUT 13%. HBV ANTIBODIES INDICATING PAST EXPOSURE ARE REPORTED IN 65-90% OF THE GENERAL POPULATION.

(2) SEXUALLY TRANSMITTED DISEASES OF POTENTIAL RISK. EXPECT 2-50% OF UNIT STRENGTH PER MONTH TO BE INFECTED WITH GONORRHEA AND CHLAMYDIA DEPENDING ON ABSTINENCE OR PROTECTED SEX RATES. ACCORDING TO THE MINISTRY OF PUBLIC HEALTH, THERE ARE CURRENTLY AN ESTIMATED ONE MILLION HIV-POSITIVE AND 500,000 AIDS PATIENTS IN THE KT. SPORADIC CASES OF HIV INFECTION ARE POSSIBLE.

E. ANIMAL-CONTACT DISEASES.

(1) ANIMAL-CONTACT DISEASES OF GREATEST RISK.

(A) RABIES. INFREQUENT OR SPORADIC NUMBERS OF PERSONNEL BITTEN OR SCRATCHED BY POTENTIALLY INFECTED ANIMAL SPECIES COULD DEVELOP RABIES. RABIES IS A SERIOUS INFECTION WITH NEAR 100% FATALITY RATE IN THE ABSENCE OF POST-EXPOSURE PROPHYLAXIS. THE KT HAS ONE OF THE WORST RABIES PROBLEMS IN THE WORLD. RABIES-INFECTED DOGS AND CATS ARE EXTREMELY COMMON AS ARE MANY OTHER ANIMALS. WORLDWIDE, DOGS, CATS, AND BATS ARE PRINCIPAL SOURCES OF HUMAN EXPOSURE. SALIVA IN BITES OR SCRATCHES MAY PASS INFECTIONS. ON A PER CAPITA BASIS, THE KT HAS ONE OF THE HIGHEST POST-EXPOSURE TREATMENT USAGE RATES IN ASIA (324 TREATMENTS PER 100,000 POPULATION). ONE BANGKOK HOSPITAL REPORTEDLY TREATS 30-40 ANIMAL BITE CASES DAILY. HUMAN RABIES REPORTING INCLUDES: 1980 - 370 DEATHS AND 63,939 POST-EXPOSURE TREATMENTS. 1998 - 51 DEATHS AND NEARLY 200,000 POST-EXPOSURE TREATMENTS. STRAY DOGS AND CATS ARE THE MAIN SOURCES OF HUMAN

EXPOSURE. REPORTEDLY UP TO 3 PERCENT OF THE STRAY DOGS IN BANGKOK AND OTHER CITIES ARE INFECTED. REPORT ALL ANIMAL BITES OR SCRATCHES TO MEDICAL SUPPORT. RABIES PRE-BITE VACCINATION IS USUALLY RECOMMENDED ONLY WHEN GREATER THAN 24 HOURS FROM TREATMENT AFTER BITES OR IN SPECIAL ANIMAL HANDLING OCCUPATIONS.

(2) ANIMAL-CONTACT DISEASES OF POTENTIAL RISK. SPORADIC OR INFREQUENT CASES OF ANTHRAX AND Q FEVER ARE POSSIBLE.

F. OTHER DISEASES OF POTENTIAL RISK.

(1) WATER-BORNE DISEASES. LEPTOSPIROSIS CAN OCCUR AT UP TO 1% OF UNIT STRENGTH PER MONTH AFTER FRESH WATER CONTACT IN RIVERS AND STREAMS. SCHISTOSOMIASIS IS NOT KNOWN TO BE ENDEMIC IN THE KT. BECAUSE OF LEPTOSPIROSIS, SWIMMING/WADING IN FRESHWATER IS DISCOURAGED.

(2) RESPIRATORY DISEASES. THE KT IS CONSIDERED A WHO HIGH TUBERCULOSIS (TB) BURDEN COUNTRY. WITH AN INCIDENCE OF 160/100,000 THE KT WAS RANKED 16TH IN THE WORLD BY BURDEN. TB CAN BE A SERIOUS ACUTE OR CHRONIC DISEASE. THE MAIN SCREENING TOOL FOR EARLY INFECTION OR EXPOSURE TO TB IS THE PPD TEST. THERE IS A POSSIBILITY OF Elevated PPD RATES FOLLOWING DEPLOYMENT. OPERATIONAL NAVY AND MARINE UNITS SHOULD ROUTINELY RECEIVE AN ANNUAL PPD. THOSE TRANSFERRING TO A SHORE-BASED COMMAND WHO HAVEN'T HAD A PPD WITHIN ONE YEAR OF RETURN FROM DEPLOYMENT TO THE KT SHOULD HAVE PPD PRIOR TO DETACHMENT.

(3) SOIL CONTACT DISEASES. HIGH RATES OF PREVALENCE ARE REPORTED IN THAILAND. IN 1996, PREVALENCE (PERCENT OF POPULATION INFECTED) WAS 21.6% FOR HOOK WORM, 1.9% FOR ASCARIASIS ROUNDWORM, AND 3.9% TRICHURIASIS WHIPWORM. DONT WALK BAREFOOT.

#### 4. MEDICAL CAPABILITIES OVERVIEW.

A. INTERNATIONAL S.O.S. (ISOS).

(1) ISOS DESCRIPTION/ROLE. QUALITY AND AVAILABILITY OF WESTERN STANDARD CARE IN THE KT VARIES BY LOCATION. DECIDING ON APPROPRIATE HN CARE CAN BE A DIFFICULT TASK. THE PACIFIC TRICARE CONTRACTOR COVERING HN MEDICAL UTILIZATION IN THE KT IS INTERNATIONAL S.O.S. (ISOS). THEY ARE RESPONSIBLE FOR COORDINATING CARE WITHIN THE KT IN A MANNER SIMILAR TO THE WAY TRICARE WOULD COORDINATE CARE WITHIN THE CIVILIAN COMMUNITY IN THE US. THEY CAN BE AN INVALUABLE RESOURCE IN PROVIDING DETAILED CAPABILITIES ON FACILITIES COVERED IN THIS SECTION AND ELSEWHERE WITHIN THE KT. PRESENT GUIDELINES ARE FOR TRULY EMERGENT CARE, ISOS WILL COVER REASONABLE AND APPROPRIATE CHARGES AT FACILITIES THE SENIOR MEDICAL OFFICER FEELS IS MOST APPROPRIATE FOR EMERGENCY CARE AND SITUATION. WHENEVER POSSIBLE, MEDICAL UNITS EFFECTING HN MEDICAL SUPPORT MUST HAVE THIS CARE COORDINATED WITH ISOS. LATITUDE FOR CHOICE OF FACILITY SHOULD BE GIVEN TO ISOS WITHIN FORCE PROTECTION AND OPERATIONAL GUIDELINES. FAILURE TO ALLOW THIS LATITUDE MAY RESULT IN ISOS NOT BEING RESPONSIBLE FOR COST OF MEDICAL CARE RENDERED. THE COST MAY BE (AND HAS IN THE PAST) BORNE BY THE UNIT INVOLVED. DISSATISFACTION WITH ISOS SHOULD BE BROUGHT TO THE ATTENTION OF THE JTF/OPERATIONAL SURGEON ASAP.

(2) ISOS (THAILAND) CONTACT INFORMATION. IN THAILAND, THE ISOS COORDINATION IS EFFECTED BY THE JUSMAGTHAI TRICARE/ISOS COORDINATION OFFICER NURSE PRANEE SAWASDIKIJ. JUSMAGTHAI IS LOCATED AT 7 DATHORN TAI ROAD, BANGKOK, 10120, PHONE: 287-1036 EXT. 511. FAX 285-6228. CELL: 661-01-633-3793. 24-HOUR PHONE: 396-0332 OR 374-7022. IF DIRECT CONTACT IS REQUIRED WITH ISOS AFTER MANDATORY FIRST CONTACT

WITH THE JUSMAGTHAI TRICARE/ISOS OFFICER, THE ISOS FACILITY IN BANGKOK IS LOCATED AT 11F DIETHELM TOWER B, 93/1 WIRELESS ROAD, LUMPKINI, PATHUMWAN, BANGKOK, THAILAND 10330. PHONE 66 (0)2-256-7145, FAX X-7151. THE ISOS REGIONAL OFFICE POC IN SINGAPORE IS MS. IRENE CHEW (65) 6330-0186 OR (65) 6338-9277.

B. CIVILIAN HEALTH CARE. THE MINISTRY OF PUBLIC HEALTH (MOPH) IS ONLY MARGINALLY EFFECTIVE LACKING COORDINATION AMONG GOVERNMENT DEPARTMENTS AND PUBLIC/PRIVATE SECTORS. QUALITY OF CARE IN PUBLIC HOSPITALS GENERALLY DOES NOT MEET US STANDARDS. HOWEVER, PRIVATE FACILITIES OFFER CARE THAT MEETS US STANDARDS. ISOS CAN HELP IDENTIFY SUCH FACILITIES. THE HIGHEST LEVEL OF MEDICAL CARE (SIMILAR TO FULLY DEVELOPED COUNTRIES) IS FOUND IN BANGKOK, WHILE ADEQUATE IN OUTLYING REGIONS, DO NOT EXPECT US LEVELS OF CARE.

C. MEDICAL PERSONNEL. THE TRAINING OF PHYSICIANS, NURSES, PHARMACISTS, AND DENTISTS IS COMPARABLE TO THE US. THAI MEDICAL SCHOOLS ARE MODELED AFTER BRITISH MEDICAL SCHOOLS, AND GRADUATES OFTEN RECEIVE ADVANCED TRAINING IN EUROPE OR THE UNITED STATES. PRIVATE FACILITIES TEND TO HAVE HIGHER QUALITY PHYSICIANS AND MANY HAVE TRAINED AT US FACILITIES.

D. MEDICAL TREATMENT FACILITIES. PROVINCIAL/DISTRICT HOSPITALS PROVIDE MOST PUBLIC SECTOR HEALTH CARE. WHILE PUBLIC HEALTH SERVICES ARE FREE, FACILITIES OFTEN ARE OVERCROWDED, UNDERSTAFFED, AND OFFER LIMITED SERVICES. PRIVATE FACILITIES ARE WELL STAFFED AND EQUIPPED.

E. MEDICAL MATERIEL. ALTHOUGH DOMESTIC MEDICAL EQUIPMENT AND PHARMACEUTICAL INDUSTRIES ARE WELL ESTABLISHED, PRODUCT QUALITY DOES NOT MEET INTERNATIONAL STANDARDS. MOST HIGH QUALITY PHARMACEUTICALS AND HIGH TECHNOLOGY EQUIPMENT ARE IMPORTED FROM EUROPE, JAPAN, AND NORTH AMERICA.

F. BLOOD SUPPLY. THE KT BLOOD SUPPLY IS NOT SAFE. SEE COBRA GOLD ANNEX Q FOR GUIDANCE.

G. THAI MILITARY HEALTH CARE. THE KT MILITARY ATTEMPTS TO PROVIDE HEALTH CARE SERVICES DOWN TO THE LOWEST INSTALLATION LEVEL. CIVILIAN HOSPITALS ALSO PROVIDE ROUTINE/EMERGENCY MEDICAL SUPPORT TO MILITARY PERSONNEL AND THEIR FAMILY MEMBERS. CIVILIAN HOSPITALS MAY BE THE ONLY SOURCE OF MEDICAL CARE FOR MILITARY UNITS IN OUTLYING PROVINCES.

H. MILITARY MEDICAL PERSONNEL. MILITARY MEDICAL PERSONNEL PROBABLY ARE COMPARABLE TO THEIR CIVILIAN COUNTERPARTS.

I. MILITARY MEDICAL TREATMENT FACILITIES (MTF'S). THE BEST MILITARY MEDICAL FACILITIES ARE THE TERTIARY CARE HOSPITALS IN BANGKOK, WHICH ARE COMPARABLE TO THEIR CIVILIAN/US COUNTERPARTS.

J. DISASTER AND EMERGENCY RESPONSE CAPABILITIES. THE KT'S DISASTER RESPONSE CAPABILITIES DO NOT MEET US STANDARDS.

K. MEDICAL TREATMENT/EVACUATION FACILITIES. IT IS NOT POSSIBLE IN THIS MESSAGE TO HIGHLIGHT THE CAPABILITIES OF EVERY KT MEDICAL FACILITY. MEDICAL PERSONNEL ARE ADVISED TO REFER TO COBRA GOLD 2003 APPENDIX 9 TO ANNEX Q HOST NATION MEDICAL SUPPORT FOR MORE DETAILED GUIDANCE. WHEN OPERATIONALLY APPROPRIATE, THE JUSMAGTHAI TRICARE/ISOS OFFICER CAN OFTEN PROVIDE DETAILED ANALYSIS AND ADVICE ON SUITABILITY OF KT HOSPITALS. THE FOLLOWING ARE SOME OF MANY HN HOSPITALS LISTED WITHOUT IMPLIED PREFERENCE IN THE COBRA GOLD ANNEX Q.

(1) BANGKOK SAMITIVIJ HOSPITAL. A PRIVATE 250 BED FACILITY FREQUENTLY UTILIZED BY JUSMAGTHAI PERSONNEL FOR ITS HIGH LEVEL AND QUALITY OF CARE.

(2) SAMAE SAN QUEEN SIRKIT HOSPITAL. A 550 BED HOSPITAL. PHONE

Attachment 1

66-38-245-777.

(3) PHITSANULOK 3RD ROYAL THAI ARMY HOSPITAL. A 150 BED FACILITY.  
NO MRI. HAS CT, ULTRASOUND, AND ROUTINE X-RAYS. CALL 66-55-258-021  
EXT 3002. ASK FOR MEDICAL OFFICER. ALTERNATE NUMBER 055-251-128  
(MAY BE FAX NUMBER).

(4) LOP BURI RTAF HOSPITAL. A 500 BED FACILITY. PHONE  
66-36-486-050-53. REPORTED TO HAVE FULL CAPABILITIES.

(5) KORAT (NAKORN RATCHASIMA) RATCHASIMA-THONBURI GENERAL HOSPITAL.  
A 400 BED HOSPITAL. PHONE 66-44-262-000-50.

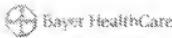
(6) UDORN-THANI GENERAL HOSPITAL. AN 800 BED FACILITY. PHONE  
66-42-348-888.

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# K9advantix®

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## How It Works

K9 Advantix® combines two ingredients to repel and kill fleas, ticks, and mosquitoes that may cross your dog's skin. Each ingredient begins its effect years on contact, attacking different nerve cells at different sites. When combined, the two ingredients normalize the parasite's nervous system. This leads to rapid paralysis and death of the parasite.

### Stop fleas from biting:

K9 Advantix® offers proven protection against fleas. It repels adult fleas before they can jump. While K9 Advantix® flea oil is repelled and killed before they can bite, involving the potential risk of a tick transmitted disease.

### Prevent ticks from attaching:

K9 Advantix® proven protection against ticks. It repels adult ticks before they can attach. While K9 Advantix® ticks are repelled and killed before they can bite, involving the potential risk of a tick transmitted disease.

### Repels mosquitoes from biting:

K9 Advantix® repels and kills mosquitoes before they can bite. Research demonstrates that K9 Advantix® kills 98.2 percent of mosquitoes and reduces their feeding by 95.2 percent. Mosquitoes that do not have cachet transmit disease-causing organisms, keeping your pet protected.

**DO NOT USE ON CATS.** Due to their unique physiology and inability to metabolize certain chemicals, K9 Advantix® should not be used on cats.

\* U.S.P.C. 97/98.

Regulatory status of K9 Advantix® varies by country and varies between adult flea control products & larval treatments. Please consult your veterinarian or Bayer representative for more information. ©2002 Bayer Animal Health. K9Advantix.com. K9Advantix is a registered trademark of Bayer Animal Health. U.S. Pat. Tm. Reg. Off. No. 2,414,111.

\*Pounds per liter.

Developed at VPI  
McGill University  
Montreal, Quebec

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